

Application Serial No. 10/729,694
Reply to Office Action of August 8, 2006

NOV 01 2006 PATENT
Docket No. CU-3477

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 1-7 are pending in the present application before this amendment. Claim 1 has been amended. Claim 2 has been canceled without prejudice. By the present amendment two paragraphs in the specification have been amended and no claims have been amended. No new matter has been added.

In the Office Action, claims 1-4, 6, and 7 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,548,853 (Hwang). The "et al." suffix is omitted in a reference name.

The Applicants respectfully **disagree** with the Office Action because the cited Hwang reference does not teach each and every claimed limitation of the present invention.

Whether or not Hwang allegedly teaches forming a recessed portion at side surfaces of the second contact hole, the Applicants respectfully point out that Hwang teaches making the recessed portion (Hwang Fig 2C, item 216a) above the silicon nitride film (Hwang Fig 2C, item 214). Whereas the presently claimed method as recited in claim 1 requires, inter alia, the following limitation:

—forming a recessed portion at side surfaces of the second contact hole and **below the silicon nitride film** by wet-etching the first insulating film remained in the second contact hole-- (emphasis added).

Clearly, Hwang does not teach the above limitation, among others, directed to **—forming a recessed portion ... below the silicon nitride film—**. Therefore, Hwang does not teach each and every claimed limitation of the present invention. At least for this reason

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alone, withdrawal of the rejection of claims 1-4 and 6-7 is respectfully requested.

Further, Hwang (see FIG 1, item 116; and FIG 2E, item 225) results in destabilizing the naked capacitor electrode, which makes it prone to collapse when the surrounding support material (see Hwang FIG 2D, items 216 & 218 and see present application FIG 1, item 32) is stripped away from it. This prior art problem is shown in the present application FIG 2 (PRIOR ART), item 35, but Hwang for the reasons as described above fails to even recognize this problem let alone provide any solutions.

In contrast to Hwang, the present invention as disclosed in an embodiment of the present application provides, inter alia, a **stabilizing buttress around the base** of the resultant capacitor electrode (260). That is, because the silicon nitride layer (200) is **above** the first insulating film (180) and **below** the second insulating layer (220), then, when the second insulating layer (220) is removed, the first insulating film (180) and the silicon nitride layer (200) remain and result in buttressing the base of the storage node electrode (260). This causes stabilization of the storage node electrode (see present application FIG 3G item 260 surrounded by items 200 and 180a) from collapsing. As pointed out in the specification page 5, lines 3-5, that this "can improve production yield by preventing tilt of the storage node electrode thereby resulting in the elimination of the defects originated from a bridging phenomenon."

In summary, Hwang fails to teach each and every claimed limitation of the present invention and fails to teach or suggest this distinctive difference and advantages as disclosed in the present application by providing the feature of stabilizing the naked storage node electrode (260) for higher production yields of the resultant semiconductor product. Therefore for this reason alone, this rejection of claims 1-4 and 6-7 should be

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withdrawn.

In the Office Action, claim 5 stands rejected under 35 U.S.C. § 103(a) as being obvious over Hwang and in view of the Examiner's comments that determining a suitable thickness of the second insulating film would be obvious.

The applicants respectfully disagree with the examiner's comments of obviousness; however, for the same reasons as asserted above, prima facie case of obviousness has not been established as Hwang does not teach each and every claimed limitation of the present invention. That is, even if Hwang's teachings are combined with the Examiner's allegation (which the Applicants respectfully disagree), the combination in whole or in part still does not teach each and every claimed limitation of the present invention, because the combination fails to teach the silicon nitride film (200) above the first insulating layer (180a) and below the second insulating layer (220) as disclosed in the present application. As disclosed in the present application, the silicon nitride film layer (200) sandwiched between the two insulating layers (220 and 180a) provides the distinct advantage in allowing the selective removal of only the second insulating film while maintaining the silicon nitride (200) and the first insulating film (180a) to remain as stabilizing buttresses around the naked storage node electrode (260) as shown in FIG 3G.

Therefore, the Applicants respectfully request withdrawal of the rejection of claim 5, at least since Hwang in whole or in combination with the Examiner's comments fails to teach each and every claimed limitation of the present invention.

For the reasons set forth above, the Applicants respectfully submit that claims 1-7 pending in this application are in condition for allowance over the cited references.

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Accordingly, the Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter.

This amendment to the specification and remarks is considered to be responsive to all points raised in the Office Action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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Loren K. Thompson, Ph.D., Reg. No. 45,918
Ladas & Parry
224 South Michigan Avenue
Chicago, Illinois 60604
(312) 427-1300